

Amendments to the Claims

1. (Withdrawn) A method for manufacturing a suspension bar for a permanent cathode used in an electrolysis of metals, wherein the suspension bar is made of a rigid metal outer jacket and a highly electroconductive inner part inside it, after which the outer jacket is removed at least from one end of the bar, wherein a refined steel outer jacket and a highly electroconductive core are in close contact with each other wherein the parts of the bar are joined to each other by drawing, wherein the core is connected to the outer jacket by placing a core preform inside the outer jacket and by drawing an arbor through the preform in a drawing machine.

2. (Withdrawn) The method according to claim 1, wherein the highly electroconductive core is copper.

3. (Withdrawn) The method according to claim 1, wherein the highly electroconductive core is aluminum.

4. (Canceled)

5. (Withdrawn) The method according to claim 1, wherein a steel bar is used as the arbor.

6. (Withdrawn) The method according to claim 5, wherein the steel bar is left inside the highly conductive core.

7. (Withdrawn) The method according to claim 18, wherein the core is connected to the outer jacket by placing a core preform inside the outer jacket and by pressing the ends of the core, so that the core is expanded tight to the jacket.

8. (Canceled)

9. (Withdrawn) The method according to claim 8, wherein casting is made using the outer jacket as the mould into which the molten core metal is poured.

10. (Withdrawn) The method according to claim 20, wherein in order to obtain a metallurgical bond between the jacket and the core, the core preform is placed in solid form inside the outer jacket and then the core is melted inside the outer jacket which remains in sufficiently solid form.

11. (Currently amended) The method according to claim 19 ~~or 10~~, wherein the outer jacket is preheated before bonding.

12. (Currently amended) The method according to claim 19 ~~or 10~~, wherein the outer jacket and the core are preheated during bonding.

13. (Currently amended) The method according to claim 19 ~~or 10~~, the outer jacket and the core are preheated after bonding.

14. (Currently amended) The method according to claim 19 ~~or 10~~, wherein the outer jacket is held in a vertical position with the bottom end closed when core metal is put into the jacket.

15. (Previously amended) The method according to claim 19, wherein casting is made by immersing the outer jacket into a melt of core metal.


16. (Previously amended) The method according to claim 15, wherein the outer jacket is immersed in the melt essentially in a horizontal position, and wherein the ends of the jacket are closed and holes are made in the upper part of the jacket for pouring the melt and releasing air.

17. (Previously amended) The method according to claim 15, wherein the outer jacket is immersed in the melt essentially in a vertical position, wherein the bottom end of the jacket is closed.

18. (Withdrawn) A method for manufacturing a suspension bar for a permanent cathode used in an electrolysis of metals, wherein the suspension bar is made of a rigid metal outer jacket and a highly electroconductive inner part inside it, after which the outer jacket is removed at least from one end of the bar, wherein a refined steel outer jacket and a highly electroconductive core are in close contact with each other wherein the parts of the bar are joined to each other by upsetting.

19. (Currently amended) A method for manufacturing a suspension bar for a permanent cathode used in an electrolysis of metals, wherein the suspension bar is made of a rigid metal outer jacket and a highly electroconductive inner part inside it, after which the outer jacket is removed at least from one end of the bar, wherein a refined steel outer jacket and a highly electroconductive core are in close contact with each other wherein the parts of the bar are joined to each other by casting, and wherein in order to obtain a metallurgical bond between the jacket and the core, the core is fixedly attached to the jacket by casting it in molten form inside the solid jacket.

20. (Withdrawn) A method for manufacturing a suspension bar for a permanent cathode used in an electrolysis of metals, wherein the suspension bar is made of a rigid metal outer jacket and a highly electroconductive inner part inside it, after which the outer jacket is removed at least from one end of the bar, wherein a refined steel outer jacket and a highly

 electroconductive core are in close contact with each other wherein the parts of the bar are joined to each other by melting.

21. (Withdrawn) The method according to claim 18, wherein the highly electroconductive core is copper.

~~22~~ (Previously added) The method according to claim 19, wherein the highly electroconductive core is copper.
